

## 03040205-03

(*Cane Savannah Creek*)

### General Description

Watershed 03040205-03 (formerly 03040205-080 less the Pocotaligo River headwaters) is located in Sumter County and consists primarily of *Cane Savannah Creek* and its tributaries. The watershed occupies 88,077 acres of the Upper Coastal Plain region of South Carolina. Land use/land cover in the watershed includes: 35.8% agricultural land, 21.3% forested land, 20.2% urban land, 18.5% forested wetland, 2.9% scrub/shrub land, 0.6% water, 0.4% barren land, and 0.3% nonforested wetland.

Hatchet Camp Branch (McCray Lake) and Brunson Swamp (Elliott Lake, Burnt Gin Lake) merge to form Cane Savannah Creek. Nasty Branch (Red Oak Branch, Bush Bay, Bush Branch, Bethel Creek, Cain Millpond) enters Cane Savannah Creek next followed by Green Swamp. Green Swamp accepts drainage from Horsepen Branch, Mush Swamp (Suicide Branch, Frierson Pond, Bluffhead Branch, Loring Millpond, Spann Branch, Long Branch, Booths Pond, Sawmill Pond, Cypress Bay, Second Millpond), and Shot Pouch Branch (Swan Lake) before draining into Cane Savannah Creek. The headwaters of Brunson Swamp are within the Manchester State Forest, and Shaw Air Force Base lies between Mush Swamp and Long Branch. There are a total of 129.7 stream miles and 614.0 acres of lake waters in this watershed. Green Swamp is classified FW\* (Dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.0) and the remaining streams in the watershed are classified FW.

### Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
RS-03345	RS03/BIO	FW	BRUNSON SWAMP AT S-43-251, 9.25 MI SW OF SUMTER
PD-239	S/W	FW	NASTY BRANCH AT S-43-251 7.5 MI SW OF SUMTER
PD-039	S/W	FW*	GREEN SWAMP AT S-43-33

***Brunson Swamp (RS-03345)*** – This is a blackwater system, characterized by naturally low pH and dissolved oxygen conditions. Although pH and dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Aquatic life uses are partially supported based on macroinvertebrate community data. Recreational uses are not supported due to fecal coliform bacteria excursions.

***Nasty Branch (PD-239)*** – This is a blackwater system, characterized by naturally low pH conditions. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Aquatic life uses are not supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. A significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

**Green Swamp (PD-039)** – Aquatic life uses are not supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. Recreational uses are fully supported, and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

## Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-049	GB	MIDDENDORF	SUMTER PLANT 1 - #3

## NPDES Program

### Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
CANE SAVANNAH CREEK CITY OF SUMTER/TWIN LAKES SD PIPE #: 001 FLOW: 0.035	SC0023647 MINOR DOMESTIC
CANE SAVANNAH CREEK PILGRIMS PRIDE CORP./POULTRY PROC. PLT PIPE #: 002 FLOW: 0.104	SC0000795 MAJOR INDUSTRIAL
MUSH SWAMP USAF/SHAW AIR FORCE BASE PIPE #: 007 FLOW: 0.578	SC0024970 MINOR INDUSTRIAL
MUSH SWAMP TRIBUTARY HIGH HILLS RURAL/HARWOOD MHP PIPE #: 001 FLOW: 0.0072	SC0031704 MINOR DOMESTIC
MUSH SWAMP BURGESS GLEN MHP I PIPE #: 001 FLOW: 0.018	SC0031925 MINOR DOMESTIC
MUSH SWAMP BURGESS GLEN MHP II PIPE #: 001 FLOW: 0.018	SC0032239 MINOR DOMESTIC
MUSH SWAMP CAROLINA MOBILE COURT WWTP PIPE #: 001 FLOW: 0.030	SC0032212 MINOR DOMESTIC
MUSH SWAMP JOE SINGLETON MINE #4 PIPE #: 001 FLOW: M/R	SCG730171 MINOR INDUSTRIAL
MUSH SWAMP CLAUDE NEWMAN & SONS/CNS MINE PIPE #: 001 FLOW: M/R	SCG730197 MINOR INDUSTRIAL
MUSH SWAMP GLASSCOCK COMPANY, INC. PIPE #: 001, 01A FLOW: 0.64	SC0040088 MINOR INDUSTRIAL

NASTY BRANCH  
DYSON LANDSCAPING/CAINS MILL MINE  
PIPE #: 001 FLOW: M/R

SCG730152  
MINOR INDUSTRIAL

NASTY BRANCH  
PHIBRO-TECH INC.  
PIPE #: 001 FLOW: 0.11

SC0034860  
MINOR INDUSTRIAL

SPANN BRANCH  
BRIARCLIFF MHP  
PIPE #: 001 FLOW: 0.026

SC0031844  
MINOR DOMESTIC

## **Nonpoint Source Management Program**

### ***Land Disposal Activities***

#### **Landfill Facilities**

***LANDFILL NAME***  
***FACILITY TYPE***

***PERMIT #***  
***STATUS***

G&K TANK SERVICE  
LAND APPLICATION

432752-8001  
ACTIVE

S.C.R. COMPOSTING SITE  
COMPOSTING

432661-3001  
ACTIVE

PHIBRO TECH INC.  
INDUSTRIAL

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CLOSED

TOWN OF WEDGEWOOD DUMP  
MUNICIPAL

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CLOSED

BURGESS BROGDEN C&D DUMP  
CONSTRUCTION

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CLOSED

SUMTER COUNTY WOOD PROCESSING FACILITY  
COMPOSTING

431001-3001  
ACTIVE

CARTER COMPANY C&D LF  
C&D

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PROPOSED

### ***Mining Activities***

***MINING COMPANY***  
***MINE NAME***

***PERMIT #***  
***MINERAL***

SUMTER COUNTY SAND  
SMG, INC. PIT

0646-85  
SAND

JOE SINGLETON CO.  
SINGLETON MINE #4

1008-85  
SAND/CLAY

CLAUDE NEWMAN & SONS LLC  
LEE CONSTRUCTION MINE #1  
HISTORIC HILLS OF STATESBURG  
SUMMIT MINE

0878-85  
SAND/CLAY  
1411-85  
SAND

DYSON LANDSCAPING  
CAINS MILL MINE

0418-85  
SAND/CLAY

## **Growth Potential**

There is a high potential for residential, commercial, and industrial growth in this watershed, which contains the majority of the City of Sumter and Shaw Air Force Base. Several major U.S. highways intersect in Sumter and increase the urban sprawl in every direction outside of the city. There are also several industrial parks and three rail lines.

## **Watershed Restoration and Protection**

### ***Total Maximum Daily Loads (TMDLs)***

A TMDL was developed by SCDHEC and approved by EPA for ***Nasty Branch*** water quality monitoring site ***PD-239*** to determine the maximum amount of fecal coliform bacteria it can receive and still meet water quality standards. Nonpoint sources of fecal coliform are poultry AFOs, land application of manure, possible failing OSWD systems, wildlife, and cattle with direct access to creeks. The TMDL states that a 5% reduction in fecal coliform loading is necessary for the stream to meet the water quality standard.